Exhibit 4
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K990895

# 510(k) Summary

## Submitted by:

Daniel J. Manelli Farkas & Manelli, P.L.L.C. 2000 M Street NW (Suite 700) Washington, DC 20036

On behalf of Con-Cise Contact Lens Co., Inc. 510(k) Submission: Oxycon™ RGP Contact Lens

Device Classification: Rigid Gas Permeable Contact Lens (21 CFR 886.5916)

Predicate Device: Oxycon Rigid Gas Permeable Contact Lens (K974636)

\* \* \* \* \*

## NAME AND USE OF DEVICE

Device Generic Name: wilofocon A

Device Trade Name: Oxycon rigid gas permeable contact lens

Indications: Oxycon rigid gas permeable contact lenses

are indicated for daily wear correction of visual acuity in aphakic and non-aphakic persons with non-diseased eyes who are nearsighted (myopic), farsighted (hyperopic),

presbyopic or have corneal astigmatism.

Airperm Ranges: Chord diameter 6.5 to 11.5 mm

Center thickness 0.05 to 0.70 mm

Base Curve 6.50 to 9.00 mm

Powers -20.00 to +20.00 diopters

Cleaning and Disinfection: The Oxycon rigid gas permeable contact lens

must be disinfected using only a chemical

(not heat) disinfection system as

recommended.

# **DEVICE CHARACTERISTICS**

The Oxycon (wilofocon A) Rigid Gas Permeable Contact Lens is available as a spherical, aspherical, and astigmatic (toric) lens. The lens material, wilofocon A, is a fluoro silicone acrylate polymer which contains D&C Green No. 6 as a color additive. The Oxycon (wilofocon A) Contact Lens is a hemispherical shell of the following dimensions:

## LENS PARAMETERS AVAILABLE

* Diameter
for Low Minus Lens:
* Powers20.00 to +20.00 Diopters  *Aspheric Lens Eccentricity1.5 to 1.5  Oblate to Prolate
Peripheral Curves 0.1 to 10 mm. Flatter or Steeper than Base Curve * Toric Lens
Axis
The why sical/antical reportion of the long area
The physical/optical properties of the lens are:
* Specific Gravity

# SUMMARY OF STUDIES Oxycon (wilofocon A) Rigid Gas Permeable Contact Lens

#### PRECLINICAL STUDIES

# 1. Systemic Injection Test in Mice

The test is based on the FDA guidelines entitled "Testing Guidelines for Class II Contact Lenses. April 1989," and the United States Pharmacopeia XXII, National Formulary XVII. None of the test and control animals exhibited overt signs of toxicity at any of the observation points and hence the test material is considered non-toxic.

## 2. Eye Irritation Test in Rabbits

The test is based on the FDA guidelines entitled "Testing Guidelines for Class III Contact Lenses, April 1989." The extract of test contact lenses was evaluated for the potential to produce ocular irritation over a 72 hour period. The test article did not cause any significant irritation to the ocular tissue of the test animals.

## 3. Tissue Culture-Agar Overlay Cytotoxicity Assay

The assay is based on that described in USP and National Formulary. The contact lens blanks did not cause any observable cytotoxic effects when tested according to the procedures outlined in the study report and is therefore considered non-cytotoxic.

Based on the results of the preclinical testing it is reasonable to assume that the Oxycon (wilofocon) Rigid Gas Permeable Contact Lens Polymer is non-toxic.

### **CLINICAL STUDIES**

All eyes enrolled in the study were accounted for. A total of 122 eyes were enrolled in the study. A total of 110 eyes completed a minimum of three months of contact lens wear, 0 eyes were incomplete and 12 eyes were discontinued. The largest number of patients enrolled in this study (92.7%) were previous wearers of rigid gas permeable contact lenses. The average age was 37 years. During the three-month course of this study there were a total of 428 scheduled and 38 unscheduled eye visits.

Slit-Lamp: There was a total of 99 reports of Grade 1 SLFs of which the largest number was for corneal staining (77 reports or 18% of all visits). The staining at

the follow-up visits was nearly all of the type three and nine o'clock staining, which was also present at the initial visit. The next most common slit lamp findings were for injection, which included 15 reports or 3.5% of the visits. There were five reports of grade 2 findings, all for staining and which were resolved by lens changes.

The total number of slit-lamp findings were within expecteds for wearers of an RGP contact lens. The large number of reports for corneal staining can be attributed to the fact hat most patients were previous rigid lens wearers who entered the study with three and nine o'clock staining. During the time that lenses were worn by the discontinued patients there were no slit lamp findings reported.

SPCs: There were a total of 135 reports of symptoms, problems or complaints for the 356 eye visits during the three-month course of this study. The largest number of complaints (8.7%) was for variable vision, followed by lens awareness (6.2%). All symptoms, problems or complaints were reduced over time. None of the categories for symptoms, problems, and complaints can be considered outside of the normal expecteds for a rigid gas permeable contact lens.

Keratometry: The majority of the eye meridians (90.4%) showed no change to 0.50 diopters change over the course of this investigation. Changes of 1.00 diopter or less were found in 90.6% of the eye meridians. The number of changes were nearly equal for those who had increased or decreased power which resulted in an average change of 0.08 diopters flattening. In the three patients who experienced a change of greater than 1.00 diopter, two eye meridians showed a decrease of 1.25 diopters and one meridian showed an increase of 1.25 diopters. The changes in keratometry were generally low and may be attributed to adaptation to a new lens type or usual clinical measurement variation. The three patients who showed changes in one eye meridian of 1.25 diopters all had no change in their normal visual acuity of 20/20 and no significant signs or symptoms.

Refraction: the majority of the eyes (99.1%) showed no change to 1.00 diopters change over the course of this investigation. The number of spherical and cylindrical changes were nearly equal for those who had increased or decreased power, which resulted in an average change of near zero. In the two patients who experienced a change of greater than 1.00 diopter, one (306) showed a spherical change in the left eye of 1.50 diopters. One patient (505) showed a cylindrical decrease in both eyes of 1.50 diopters, which was attributed to a better fit of the test lens than was the case for the lens worn prior to the study. The changes in refraction were generally low and may be attributed to a better fitting lens or usual clinical measurement variation. The three eyes that showed changes of 1.50 diopters all had no change in their normal visual acuity of 20/20 and no significant

signs or symptoms. For the patients who discontinued, the 12 test eyes showed no change to 0.50 diopters change over the course of this investigation. The number of spherical and cylindrical changes were nearly equal for those who had increased or decreased power. The changes in refractive sphere and cylinder were generally low and may be attributed to normal variation in the findings.

Visual Acuity: A comparison was made between the best corrected visual acuity at the initial examination to the visual acuity when wearing contact lenses at the final examination. There were no patients who experienced a drop of visual acuity that was greater than one line during the course of this study. Two patients had reduced visual acuity both initially and at the end of this study and merit comment. Visual acuity results when wearing Oxycon Rigid Gas Permeable Contact Lenses during the course of this investigation were found to be within expecteds. No patients experienced a drop of visual acuity that was greater than one line.

The average wearing time achieved at the end of the study was 14.9 hours.

#### Conclusions:

There were no eyes that experienced adverse reactions, SLFs requiring treatment or SPCs requiring treatment. The Oxycon rigid gas permeable contact lens was shown to be worn safely by all patient eyes in this study including those that completed (110 eyes) and discontinued (12 eyes) the study.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

APR 1 4 1999

Mr. Daniel J. Manelli Representative for Con-Cise Contact Lens Co. 2000 M Street NW, Suite 700 Washington, DC 20036

Re: K990895

Trade Name: Oxycon™ Lens

Regulatory Class: II Product Code: 86 HQD Dated: March 16, 1999 Received: March 17, 1999

Dear Mr. Manelli:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4613. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsmamain.html".

Sincerely yours,

A. Ralph Rosenthal, M.D.

Director

Division of Ophthalmic Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

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510(k) Number (if I	known): <u>K 99 0895</u>			
Device Name:	Oxycon (wilofocon A) Rigid Gas Permeable Spherical, Aspherical, Toric, and Bifocal Contact Lenses			
Indications for use	:			
Bifocal Cont ametropia (r aphakic per	tact Lenses are indicated myopia, hyperopia, astig	d for daily wear matism and pro	rical, Aspherical, Toric, and r correction of refractive esbyopia) in aphakic and non- s may be disinfected using a	
(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)  Concurrence of CDRH, Office of Device Evaluation (ODE)				
	(Division Sign-Off) Division of Ophthalm 510(k) Number <u>K9</u>	_		
Prescription use _\(\frac{1}{2}\) (Per 21 CFR 801.1		OR	Over-The Counter Use (Optional Format 1-2-96)	